

TILING OF MODULATOR ARRAYS

ABSTRACT

In one embodiment, a pixel arrangement may be configured for a maskless lithography application using at least two array tiles, where each array tile includes a two-dimensional array with substantially equally-spaced pixels. A preferred embodiment includes two 500 x 1000 pixel array tiles separated by a displacement in a first direction and by another displacement in a second direction. In this embodiment, the scanning direction is between the first and second directions so as to form a continuous swath. Additionally, embodiments of this invention can be applied to applications where array tiles of optical modulators are used to modulate electron beams which can subsequently expose electron beam sensitive media.